

## Abstract

An optical amplifier apparatus capable of dealing with different wavelength bands and capable of outputting an amplified light with reduced noise for any one of the wavelength bands. In a case of amplifying a light of C-band, terminals (51,52) of an optical switch (50) are connected to each other. An incident light is amplified by a first front-end optical fiber amplifier (12) and a first back-end optical fiber amplifier (18). The amplified light passes via the terminals (51,52) and through a back-end WDM coupler (36) and goes out of the optical amplifier apparatus (1). In a case of amplifying a light of L-band, terminals (51,54) of the optical switch (50) are connected to each other, while terminals (52,53) thereof are connected to each other. An incident light is amplified by the first front-end optical fiber amplifier (12) and first back-end optical fiber amplifier (18), passing via the terminals (51,54), thereafter being further amplified by a second front-end optical fiber amplifier (22) and a second back-end optical fiber amplifier (28). The thus amplified light then passes via the terminals (53,52) and through the back-end WDM coupler (36) and goes out of the optical amplifier apparatus (1).